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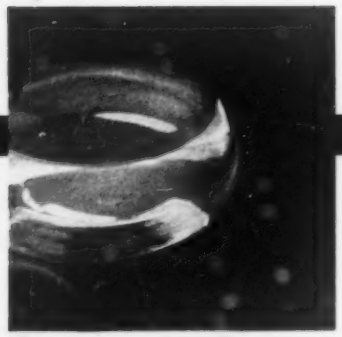
FOOD ENGINEERING

SINCE 1928, THE SOURCE ON PROCESSING, PACKAGING, AND P

FOOD LABS OF THE FUTURE

MANAGING TOMORROW'S LAB

FOOD ENGINEERING



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Beat the clock but crown the customer

Be the first in your office to throw around the latest in management acronyms: TCM (Time Compression Management). TCM is Chicago-based Andersen Consulting's concept to speed up business cycles and allow its users to be better positioned to meet their customer needs faster than the competition. Or more simply: ***time is the enemy and the customer is king.***

Three Principles of TCM

1. Put the customer first.
2. Make all decisions based on their impact on the company as a whole.
3. Eliminate all non-value-added activities.

(Source: Andersen Consulting's Application Products—America.)

The goals of TCM are: one, to minimize the time between production and customers' actual buying decisions; two, to view all decisions as part of a larger program, namely to increase product quality and increase its speed-to-market; three, to move beyond simply trying to eliminate redundant shop floor tasks and wasteful distribution practices to cut out all activities that do not contribute to product value.

"The overall goal is to reduce the initial planning-to-delivery cycle to the absolute minimum. TCM should complement and be a part of a company's overall commitment to TQM. Quality is the customer's number one concern and it is the number one principle and goal behind TCM," said William Darnton, managing partner of Andersen Consulting's Application Products—America. "TCM is a leap beyond just-in-time manufacturing (JIT) or electronic data interchange (EDI)."

...KGF—Canada does TCM

Andersen advised Kraft General Foods—Canada (KGFC) as to how to implement TCM in conjunction with Just in Time (JIT) and Statistical Process Control (SPC) to simplify overall material flow and material handling, increase product line flexibility and improve process yield.

The results? ***KGFC consistently gets a 50 to 75 percent improvement*** *in throughput from existing manufacturing processes. This change was a result of reducing material handling by 50 to 60 percent and process loss by 25 to 30 percent. Further, this has resulted in a 50 percent reduction in the required finished goods inventory. Also, lower inventories mean less of a need to destroy expired product.*

Sales drop while profitability increases

While food sales rose in 1990 by 5.5 percent over 1989 to $731 billion, adjusting for price increases, real sales actually declined by 0.9 percent, according to the U.S. Department of Agriculture's Economic Research Service's (ERS) Food Marketing System in 1990 *report.*

	1987	1988	1989	1990
Dairy processors	22	19	14	16
Food processors	110	136	107	66
Poultry processors	10	7	5	10
Seafood processors	2	5	4	4
Snack food processors	3	12	6	5
Soft drink bottlers	24	18	12	12

Source: USDA Economic Research Service.

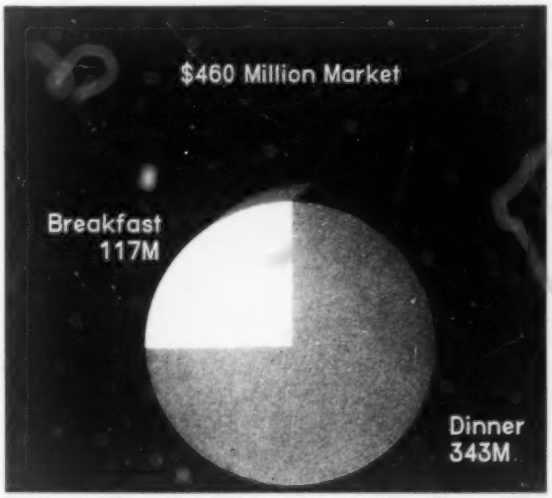
However, while retail prices have gone up, food manufacturers and retailers have managed to make a profit through controlling costs and streamlining operations, the report added. The total U.S. food system (processors and foodservice operations) purchased an estimated $108 billion in U.S. agricultural commodities, $21 billion in foreign agricultural commodities and $9 billion in seafood products in 1990.

The "system" then ***added an estimated $505 billion in value*** *to these raw products. And for the second consecutive year, merger activity slowed, with the value of mergers in 1990 reaching $9 billion, down from 1989's $14 billion. Last year's decline is no surprise since the major source of financing—junk bonds—dried up in 1990, according to the report. As the chart above shows, the numbers of mergers in the food industry has decreased since the junk bond era of the eighties has concluded.*

Microwavable sandwich market sizzles

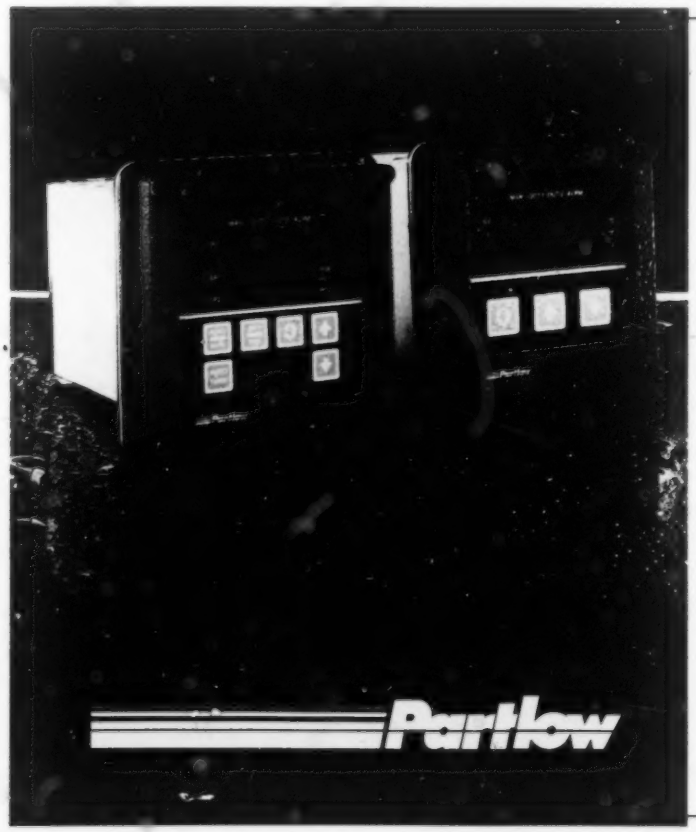
The $460 million microwavable sandwich market is heating up as fast as the products themselves, according to FIND/SVP, New York. However, there are still lingering questions as to who the products should be positioned for, according to Peter Allen, FIND/SVP's vice president, Market Research Reports.

Historically, there has been two segments in the market: breakfast (any sandwich with eggs or sausage) and dinner sandwiches (pita sandwiches, burgers, ham and cheese sandwiches).



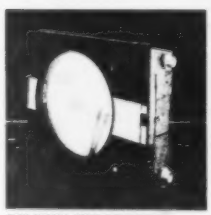
Microwavable sandwich sales heat-up while still searching for a niche. (Source: FIND/SVP.)

Total retail ***sales of dinner sandwiches should climb to $603 million by 1995,*** *for compound annual growth of 11.9 percent, according to FIND/SVP. Total retail sales of frozen breakfast sandwiches are forecast to reach $138 million by 1995, for compound annual growth of 3.4 percent.*



NEMA PROVEN CONTROLLERS AND RECORDERS FOR MANAGING TEMPERATURE, PRESSURE, AND FLOW IN THE FOOD AND DAIRY PROCESSING INDUSTRY

Today the Partlow Corporation remains a leading manufacturer of specialized instrumentation for the Food and Dairy Processing Industries. Partlow instruments are specified for a variety of applications including HTST pasteurizing, differential pressure control and CIP. The 8200 Series and 2000 Series 1/4 DIN Controllers at left are microbased single loop instruments designed for a variety of process control applications. Partlow offers a complete line of mechanical/pneumatic, analog and microbased controllers and circle chart recorders including the STLR3 recorder for HTST, shown above. Partlow microbased instruments offer digital communications capability for remote monitoring and control. Partlow instruments comply with US Public Health code regulations and meet NEMA requirements. For a complete product line brochure, specifications, and pricing call our 24 hour factory direct literature order line at extension 282.



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